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## CLAIMS

 A rotary ring for use in scale reading apparatus, comprising:

- a flexible ring, the flexible ring having scale markings provided on a surface thereof.
- A system for mounting a rotary ring for use in scale reading apparatus onto a machine part, comprising the rotary ring of claim 1 and co-operating means on said machine part, said co-operating means comprising a region of increased diameter.
- 3. A system according to claim 2 wherein the region of increased diameter is integral with the machine part.
- A system according to claim 2 wherein the region of increased diameter is not integral with the machine
   part.
  - 5. A system according to any of claims 2-4 wherein the region of increased diameter comprises an annular protrusion.
- 6. A system according to any of claims 2-4 wherein the region of increased diameter comprises a tapered surface.
- 30 7. A system according to any of claims 2-6 wherein the flexible rotary ring is provided with a tapered surface.
  - 8. A system according to any of claims 2-7 wherein at

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at least one of the region of increased diameter and the rotary ring is provided with a tapered surface and form a self locking taper.

- 5 9. A system according to claim 4 wherein the region of increased diameter comprises a ring-shaped flexible member.
- 10. A system according to any of claims 2-9 wherein the region of increased diameter is shaped so that once the flexible rotary ring is fitted over said region of increased diameter, the central region of said rotary ring is substantially parallel with the axis of said machine part.

11. A method of mounting a flexible rotary scale onto a part of a machine, said part having a region of increased diameter, the method comprising:

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stretching or shrinking the flexible rotary scale over said region of increased diameter.

- 12. A method of mounting a flexible rotary scale onto a part of a machine according to claim 11 wherein the region of increased diameter is integral with the part of the machine.
- 13. A method of mounting a flexible rotary scale onto a part of a machine according to claim 11 wherein the region of increased diameter is not integral with the part of the machine.
- 14. A method of mounting a flexible rotary scale onto a part of a machine according to any of claims 11-13 wherein the region of increased diameter comprises an

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annular protrusion.

15. A method of mounting a flexible rotary scale onto a part of a machine according to any of claims 11-13 wherein the region of increased diameters comprises a tapered surface.

- 16. A method of mounting a flexible rotary scale onto a part of a machine according to claims 11-15 wherein10 the flexible rotary scale is provided with a tapered surface.
- 17. A method of mounting a flexible rotary scale onto a part of a machine according to any of claims 11-16
  15 wherein at least one of the region of increased diameter and the flexible rotary scale are provided with a tapered surface and form a self locking taper.
- 18. A method of mounting a flexible rotary scale onto
  20 a part of a machine according to claim 13 wherein the
  region of increased diameter comprises a ring-shaped
  member.
- 19. A method of mounting a flexible rotary scale onto
  25 a part of a machine according to any of claims 11-18
  wherein the region of increased diameter is shaped so
  that once the flexible rotary scale is fitted over said
  region of increased diameter, the central region of
  said flexible rotary scale is substantially parallel
  30 with the axis of said part.